

knowledge, experience, and skills of the several authors, each with different backgrounds and interests. Professional botanists need to read it as an example of what can be done to extend scientific knowledge and its applicability to general education and conservation efforts. Although not especially useful as a primary reference, this book represents an exceptional contribution by its authors and the California Native Plant Society to fostering interest, concern, and a continuing appreciation for the natural landscapes of California.

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*Practical Handbook for Wetland Identification and Delineation.* By J. G. LYON. 1993. Lewis Publishers, Boca Raton. 157 pages. Hardcover \$59.95. ISBN 0-87371590X.

This “practical handbook” is anything but practical, and attempting to follow its guidance will likely do more harm than good. Wetland delineation is a critical decision-making process that requires well-trained experts. This book is elementary in its language and approach, seeming to interpret the complexities of delineation for a lay audience, yet its intent is clearly to teach readers how to develop wetland delineation reports. It does not achieve either objective.

In addition to the awkward writing, repetitive wording, redundant statements, and grammatical errors (e.g., “From it stems the three criterion . . .”—p. 11) that litter virtually every page, the content is imprecise, misleading, and in many cases just plain wrong. I quote first from the section on plant measurements, which tells us how to record information on vegetation (p. 67): “The scientific names have two parts written in Latin. The first word is the family or generic name. . . . The second name is that of the individual plant or plant species in the family.”

More importantly, the criterion for hydrophytic vegetation is repeatedly misstated: “A given site is determined to be a wetland for this criterion when the total dominance of FAC, FACW, and OBL plants exceeds 50% of the total dominant plants found on the site”—p. 26; “The procedure consists of determining whether 50% of the dominant plants have a high probability of occurring in wetlands”—p. 42; and “A given area is determined to be a wetland for this individual, jurisdictional criterion when the total abundance of FAC, FACW, and OBL plants exceeds 50% of the total frequency of dominant plants found at a given sampling location on the site”—p. 67. None of these renditions makes it clear that one must count the number of dominant species to determine if more than 50 percent are OBL, FACW, or FAC, and none of Lyons’ advice correctly states that this is only ONE of the acceptable ways of meeting the vegetation criterion (see 1987 Federal Manual, p. 19).

The level of advice is highly variable. On page 37, a paragraph is devoted to pacing a 100-foot line—a simple task, yet a much more difficult procedure is not elaborated: “Record whether sample points have similar or dissimilar soils to those indicated by the county Soil Survey.” Such decisions require technical knowledge and experience. Likewise, without much help, readers are instructed to sample sites at 100-foot intervals and then “supply the boundaries of any jurisdictional wetlands”—p. 44. The inclusion of numerous photographs (47 full pages or 30% of the book) might appeal to a general audience, but the captions use technical terms that are not defined, and they sometimes promise more than pictures can deliver (figure 2.3 on p. 10 is an inundated wetland, for which hydric soils are supposedly “evident”).

My comments are lengthy, but it seemed necessary to document carefully this negative review. I cannot recommend the book for any audience. I suggest instead that prospective wetland delineators study the appropriate federal manual (currently the 1987 Wetlands Delineation Manual available from the US Army Corps of Engineers, Washington, D.C. 20314-1000).

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